



SUBJECT: Transit Center Synopsis – 2006 to 2010

1. Transit Center Design and Site Plan Development Synopsis – 2006 to 2010:

- In 2000, the City of Troy acquired a 2.7 acre parcel of land under a consent judgment with Grand Sakwa with the condition that it be funded for a transit center within 10 years. The parent parcel was developed as a mixed use project, with large retail stores and an attached condominium community. Without development of the transit center the property will revert back to Grand Sakwa.
- In 2006 with the dedication of \$350,000 from the Michigan Department of Transportation and in accordance with MDOT requirements, Troy prepared a Statement of Qualifications to retain a Design and Engineering consultant to provide development (planning) and design of an intermodal transportation facility. The selected consultant would perform project definition/concept planning, including site planning, defining functional relationships, building operations, space needs, interior design and exterior circulation, building finishes, structural and foundation systems, building envelope and other major design elements; conceptual plans, preliminary design plans, investigation of environmental clearances, and preliminary engineering to 30% completion of the selected conceptual design.
- On November 10, 2006, statements of qualifications (SOQ) were received to provide conceptual and preliminary engineering /design services in accordance with the Scope of Services developed by Troy city staff.
- Troy and Birmingham city staffs participated in the review of consultant qualifications, consultant interviews and the selection of a consultant for the Transit Center.
- On April 16, 2007 a contract for Concept and Preliminary Engineering Design Services was awarded to Wendel Duchscherer (WD) of Amherst, New York by Troy City Council. WD was among six (6) consultants that were interviewed. WD was selected based on a five (5) phase selections process that included evaluation of their qualifications, interview score and price. WD is a nationally recognized architectural and engineering firm. Their expertise includes a mix of bus maintenance and multi-modal facility design projects.
- On June 30, 2007 a contract was executed with Wendel Duchscherer for design services based on their project approach in compliance with the scope of services determined by the City of Troy.

- A kick-off meeting with WD on August 29, 2007 was attended by staff and stakeholders from both cities to develop a vision for the transit center. Additional meetings were held to refine the vision and select the conceptual plan that best fit the vision.
- On November 13, 2007 MDOT lifted its suspension of grant payments, finally allowing the preliminary design contract with WD to proceed.
- WD submitted its Major Considerations & Design Report dated February 28, 2008 to the City of Troy for review by Troy and Birmingham engineering and planning staffs. This report identified space needs, building site amenities and other design parameters based on comments received at the visioning session and data received from AMTRAK, SMART and MDOT among others.
- Troy and Birmingham planning and engineering staffs worked with Wendel Duchscherer from August 2007 to May 2009 to develop a series of conceptual design plans for the Transit Center. HRC came on board in March 2009 to work with staff and WD to close out the WD work, proceed with refining and perfecting the site plan and obtaining site plan approval.
- Deliverables from WD included 1) Environmental Assessment; 2) Traffic Impact Study; 3) Major Considerations & Design Criteria Report; 4) Final Schematic Design Report and Artist's Rendering.
- On March 2, 2009 Troy City Council approved an Interlocal Agreement between Troy and Birmingham, which equally divided the cost of Final Engineering and Design Services on the Transit Center. To meet the 2010 deadline on the property, the work would be performed by Hubbell, Roth and Clark (HRC) consulting engineers who were already under contract with both Troy and Birmingham for general engineering design services. HRC involvement in the project is to take the 30% completion level preliminary design documents from WD, refine and perfect them and proceed through final completion of the design documents. Prior to that occurring, site plan approval is needed from the Troy and Birmingham Planning Commissions.
- The final Schematic Design Report, including a conceptual plan and artist's rendering, was presented by WD at a Joint meeting of the Troy and Birmingham Planning Commissions on April 16, 2009. Among the suggested changes and recommendations by the planning commissions that were later incorporated into the plan were:
 - A saddle style roof line instead of flat
 - Continue with a green roof, but review feasibility due to the change in slope of the roof
 - The platform canopy will not have a green roof
 - The platform canopy will have glass partition windshields
 - Add vertical element to the building
 - Modify platform canopy roof to saddle style to link with the building roof
 - The exterior material for the building will consist of terra cotta
 - Increase the base course of terra cotta around the building to 2'-6"
 - Put car drop-off at building
 - Treat inside surface of tunnel walls
 - Add seats and bike racks
 - Investigate use of geothermal energy
 - Use CCTV Security Cameras

- Add Traffic calming on Doyle Drive
 - Widen walk at entrance
 - Real time electronic signing for trains and buses
 - Realign crosswalk from Troy parking lot toward tunnel entrance
- The Troy and Birmingham planning and engineering staffs worked jointly to develop and refine the Troy/Birmingham multi-modal Transit Center site plan to address the issues raised by the Troy and Birmingham Planning Commissions. A revised site plan incorporating the above mentioned changes was presented by WD at a Joint Planning Commission meeting on July 14, 2009. Some of the suggested changes and recommendations by the Planning commissions that were made were:
 - Grade and safety of walkway (inclement weather).
 - Roofline design.
 - Elevator (cost factor).
 - Building square footage.
 - Building floor plans (space allotted for mechanical, janitorial and electrical storage; potential to excavate and house in basement).
 - Design of retaining walls.
 - Focal point at end of tunnel.
 - Distance from off-street parking to Amtrak platform.
 - Protection/shelter from inclement weather (drop-off area, canopy).
 - Platform location (potential to switch tracks).
 - Traffic circulation; bus and taxi access.
 - Tunnel. 1) Safety, security and maintenance. 2) Traversing site relative to width and height.
 - Accommodation for cyclists, users of other transportation modes.
 - Designs of Birmingham and Troy sides; specialize to individual City.
 - Funding of project and time line to move project forward.
 - Modular plan for potential to expand in future.
 - Correlation to SMART bus routes.
 - Provide parking and sidewalks on both sides.
 - Provide additional handicapped parking on Birmingham side.
 - Provide pedestrian drop-off area.
 - Negotiate with school to acquire small strip of land.
 - Provide covered bike/moped/scooter parking.
- The WD contract work was completed in July 2009 and the contract closed out in November, 2009.
- Troy and Birmingham planning and engineering staffs worked jointly with HRC to develop and refine the Troy/Birmingham multi-modal Transit Center site plan to address the issues raised at the July 14, 2009 joint meeting.
- A revised site plan incorporating the above mentioned changes was presented by HRC at a Joint Planning Commission meeting on January 27, 2010. Among the suggested changes and recommendations to the plan were:
 - Retaining wall that can accommodate and light public art
 - Use Michigan products as much as possible
 - Bus shelters are similar to those that are used in Birmingham, except the colors will be complimentary to the building
 - Platform canopy will have the same curve as the roof of the building

- Informational kiosks will be in the bus shelters and inside the building to provide train and bus schedules
 - Stained concrete surface to provide some resistance to graffiti
 - Design of the building is now basically set in stone
 - Change material on the clock tower from glass to an opaque element, potentially metal panels.
- Questions raised by commissioners were documented and answered in a report provided to commissioners in January 2010.
 - Due to Grand Sakwa's concern for Kroger, their shopping center tenant adjacent to the Transit Center, and other tenants east of the parking lot for the Transit Center; the site layout was modified to eliminate traffic behind the shopping center buildings. The Transit Center is now fully contained within the Transit Center property.
 - A revised site plan incorporating the above mentioned changes was presented by HRC at a Joint Planning Commission meeting on July 14, 2010. Suggested changes and recommendations by the Planning commissions were:
 - Have a futuristic, modern, contemporary look
 - Put the elevators into the bidding process so they can get prices with and without them
 - Elevators seem like an afterthought in terms of their placement
 - Platform should be enclosed and that heat should be incorporated into the design
 - If LEED certification is wanted, build it out of reclaimed materials and materials that are grown in Michigan

2. Major Building and Site Design Features and Considerations Incorporated into the Current Plan

- There is currently an Amtrak station located in Birmingham, on the west side of the tracks. The station consists of a concrete platform with a simple bus type shelter; it offers no services and does not connect to any other public transportation systems. There are two sets of tracks within the right-of-way.
- Amtrak uses the westerly tracks to serve the station, with three trains heading northwest toward Pontiac and three heading southeast to Detroit daily. The easterly tracks are used by Canadian National for freight traffic.
- The passenger platform cannot be located on the Troy (or east) side since other passenger stations are located on the west side of the tracks, and CN does not have a switch location between the Royal Oak station and the Troy/Birmingham station.
- A 2,520 gross square foot Transit center building is proposed for the site. This is less than the 3,532 square foot building identified by WD. Ancillary areas within the building were reduced and restrooms were reoriented for efficiency.
- The building includes a vestibule entrance, public waiting/seating area, restroom facilities, drinking fountains, mechanical/electrical room, storage room, and kiosk space for transit service providers and supporting services such as coffee vendors.

- Besides offering a safe, convenient connection between the Transit Center and the Amtrak platform, the tunnel also serves as a critical non-motorized link between Troy and Birmingham. The tunnel provides a convenient mid-mile railway crossing for non-motorized users, linking the Midtown Square mixed use development in Troy with the dense urban neighborhoods and the thriving Rail District in Birmingham.
- Access to the tunnel from both sides of the tracks is provided with barrier-free ramps, stairs and elevators.
- Design elements intended to improve accessibility include pedestrian scale lighting, hand rails, horizontal landing areas, benches, and radiant heat under the ramps to melt ice and snow during winter months.
- The tunnel and pathway system is designed so that various non-motorized users can use the facility simultaneously. The ramp / stair area is landscaped to improve aesthetics, reduce soil erosion / runoff, and create a comfortable, attractive space for people to enjoy.
- The passenger platform in Birmingham is enhanced by the addition of a large canopy, shielded on four sides with heat to protect users from the elements.
- Access to the site is improved with the addition of a new public street, connecting the site to Eton Street in two locations. Additional off-street parking spaces are provided, including handicapped spaces, to provide convenient access for train users. Sidewalks connecting the site to adjacent neighborhoods and commercial areas are also provided.
- Parking spaces are provided on site, including barrier-free spaces. Barrier-free sidewalks and crosswalks are provided. The building and site is designed using sustainable design concepts, including but not limited to a green roof, greywater recycling, rain gardens and geothermal heating and cooling. Both cities wanted a LEED certified project with demonstration items that are visible and could easily be used as an educational tool.
- The core mission of the DRMT plan is to repair and upgrade existing facilities and provide improved transit opportunities, while laying out a plan for future mass transit development.
- The multi-modal Transit Center is intended to contribute to the regional effort to improve the attractiveness, reliability, safety and economic efficiency of transportation service in the metropolitan Detroit region.
- The project team has coordinated this project with DRMT, and thus the approved regional transit plan currently includes the Troy-Birmingham Transit Center as a regional hub, with new sprint hub connector services proposed in the first phase to link this hub with other regional hubs in Wayne, Macomb and Oakland counties.
- The Transit Center is listed as a regional hub in the Detroit Regional Mass Transit Plan (DRMT), with future connections to the proposed Woodward Avenue Light Rail system. Additionally, Suburban Mobility Authority for Regional Transportation (SMART) officials delineated the facility as hub for the regional bus system.

- The Transit Center proposes to co-ordinate all existing transit services in the area through this site, and to add new connections that will provide substantial improvements to the reliability and efficiency of the existing transit system.
- The project team has worked with SMART to ensure that the design of the site will be appropriate for a regional transit hub, and to ensure that SMART's needs are met onsite. A drop-off area with slips for four (4) buses to wait at one time is proposed for the site.
- SMART Bus currently operates nine fixed bus routes each in Troy and Birmingham.
- Six of the current Troy bus routes currently terminate or pass through the proposed multi-modal Transit Center. These routes would generate 209 trips through the Transit Center daily and will serve multiple communities including: Auburn Hills, Berkley, Beverly Hills, Birmingham, Bloomfield Twp., Clawson, Clinton Twp., Detroit, Ferndale, Huntington Woods, Oak Park, Pleasant Ridge, Pontiac, Roseville, Royal Oak, Royal Oak Township, Southfield, St. Clair Shores, Sterling Heights, Troy, and Bloomfield Township. The routes that currently terminate or run through the area near the Transit Center are:

Route	Communities Served	Trips /Day
415	Berkley, Beverly Hills, Birmingham, Detroit, Oak Park, Royal Oak, Royal Oak Twp., Southfield, Troy	42
420	Berkley, Beverly Hills, Birmingham, Detroit, Oak Park, Royal Oak, Royal Oak Twp., Southfield, Troy	42
460	Berkley, Birmingham, Detroit, Ferndale, Huntington Woods, Pleasant Ridge, Royal Oak, Troy	65
465	Auburn Hills, Berkley, Birmingham, Bloomfield Twp, Detroit, Ferndale, Huntington Woods, Pleasant Ridge, Pontiac, Royal Oak, Troy	12
475	Berkley, Birmingham, Detroit, Ferndale, Huntington Woods, Pleasant Ridge, Royal Oak, Troy	8
780	Birmingham, Bloomfield Twp., Clawson, Clinton Twp., Fraser, Roseville, St. Clair Shores, Sterling Heights, Troy, West Bloomfield Township	40

The cities of Birmingham and Troy have been collaborating with SMART on the development of the Transit Center, and SMART has agreed to coordinate all Birmingham and Troy bus routes through the Transit Center to provide enhanced local and regional connections and improve access to jobs.

3. SUSTAINABILITY

- The Cities have also worked closely with DELEG and private industry to integrate a number of “green” components into the Transit Center.
- The Cities are seeking Leadership in Energy & Environmental Design (LEED) certification at the silver level for the building and surrounding site, and as such will also be incorporating many other sustainable systems, including, but not limited to, geothermal heating and cooling, greywater recycling, a green roof system, rain gardens and the use of recycled and renewable materials. LEED is a points based rating system that is recognized around the world for its sustainable approach to building and protection of the environment. To achieve the Silver level of certification the project will need to achieve 50 – 59 points out of 100 with many of the items listed for the transit center being one or two points by themselves.
- A LEED Silver Certification is the second tier in a 4 tier system. The site design will reduce the carbon footprint for the building and site by incorporating the following sustainable design elements:
 - Green Roof – The Transit Center’s green roof will absorb rainwater thereby reducing the volume of stormwater runoff on the site. Additionally the roof serves as an insulator, helping to keep the building cool in summer and warm in winter.
 - Storm water Management – Storm water generated by the site will remain on the site.
 - Rainwater reuse – Some of the rainwater falling on the site will be used to flush the toilets in the Transit Center.
 - Geothermal HVAC – HVAC will use geothermal energy, which will assist in keeping heating costs low.
 - LED Lighting – Consumes less electricity and lasts longer than fluorescent lights.
 - Site irrigation will be from storm water generated on the site.
 - Site irrigation requirements will be reduced through the use of specific plant species that require less irrigation than traditional plantings.
 - Water use reduction for the Transit Center of 30% compared to similar traditional facilities.
 - Energy use reductions within the Transit Center of 14% compared to similar traditional facilities.
 - Indoor environmental quality enhancements will be achieved through increased ventilation, the use of low VOC emitting materials, control of indoor chemical and pollution sources, better indoor lighting controls, increased control of thermal comfort and increased use of day lighting principles to reduce the need for artificial lighting.
 - Regional Materials – Building materials will be from providers in the immediate region, reducing emissions.
 - Recycled Materials – Recycled materials will be used whenever possible.
 - Plug- ins for electric cars will be provided in the parking areas.
- The site will also encourage non-motorized transportation through various pathways and links for bicycles and storage areas for bicycles, rollerblades, skateboards, and new emerging types of personal transportation.

- By encouraging the creation of walkable places and improving public transit options and connections, congestion on area streets will be reduced, thereby reducing commuting time and improving the quality of life for area residents.
- As communities, regional agencies, states and the federal government look towards achieving sustainability, transit systems of all sizes will help in accomplishing that goal.

4. Transit Center Planning Synopsis

- The planning and development of the multi-modal Transit Center is a collaborative effort between the cities of Troy and Birmingham, and the Troy and Birmingham-Bloomfield Chambers of Commerce.
- As the existing Amtrak station is located in Birmingham, the two cities came together to relocate and improve the existing platform to provide a multi-modal Transit Center.
- In 2008, the two cities, strongly supported by both the Troy Chamber of Commerce and the Birmingham-Bloomfield Chamber of Commerce, decided to embark on a joint planning effort for the area surrounding the Transit Center, to ensure that adjacent land uses and development supported the viability of the Transit Center, and to maximize the economic development potential of the Transit Center itself.
- The Planning Commission for the City of Troy and the Planning Board for the City of Birmingham, both charged with regulating development in their respective jurisdictions, began conducting joint public meetings to discuss the Transit Center and the land use and transportation planning regulations that needed to be put in place in both jurisdictions to maximize the impact of the Transit Center on the two communities by encouraging transit oriented development in the area.
- During the joint planning process between the two cities, the two Chambers of Commerce have continued to play a strong facilitative role, and have also met jointly on two occasions to assist in moving the Transit Center project forward and to garner support. The Chambers and the cities continue to work together to facilitate and monitor the development of the Transit Center and the corresponding Transit Center District. In an effort to keep the communities and the region updated on the Transit Center progress, the cities and chambers have established the website 15MileTransit.org.
- On December 2, 2008 at a joint meeting of the City of Troy Planning Commission and City of Birmingham Planning Board, the bodies passed the following resolution:

CITY OF BIRMINGHAM / CITY OF TROY JOINT PLANNING STATEMENT OF SUPPORT

The City of Birmingham Planning Board and City of Troy Planning Commission hereby support the following:

- Designation of the boundaries for the Birmingham/Troy Multi-Modal Transit Center Study Area, as attached.
 - Joint development of appropriate Transit Oriented Design standards to apply to all or a part of the Birmingham/Troy Multi-Modal Transit Center Study Area.
 - Cooperation between the City of Birmingham and the City of Troy on planning issues within all or a part of the Birmingham/Troy Multi-Modal Transit Center Study Area.
 - Establishment of a Joint Birmingham/Troy Planning Commission for all or a part of the Birmingham/Troy Multi-Modal Transit Center Study Area, including defining composition, powers and duties, membership requirements, terms of office, operating procedures, and other related matters.
 - Joint planning for the appropriate redevelopment of all or a part of the Birmingham/Troy Multi-Modal Transit Center Study Area.
- As a result of this joint planning effort, a two-day Transit Oriented Development Design Charrette was held on June 15-16, 2009 in Birmingham.
- This public input process was conducted by both the cities of Troy and Birmingham, and was designed to inform the public about the planning efforts for the Transit Center itself and the Transit Center District that was established in the surrounding area, and to solicit public input on the future development of the area.
- Activities included walking tours, stakeholder interviews, and visioning sessions. Topics covered included planning for multi-modal transportation options in the District, creating a pedestrian-oriented, mixed use, walkable destination around the Transit Center, and on the nature and form of development that was envisioned.
- The charrette was organized to ensure that key stakeholder groups were represented throughout the process.
- Participants in the charrette included business owners and residents of the proposed Transit Center District, developers and representatives of the Cities of Birmingham and Troy, along with architects and urban designers and students from local colleges and universities. The outcome was the presentation of design concepts and preliminary recommendations based on stakeholder input. Having all meetings open to the public and televised ensures transparency. The website www.15miletransit.org keeps the public informed on the status of the project.
- The cities of Troy and Birmingham have jointly collaborated for over 4 years in planning the Transit Center project, which will benefit not only the local citizens and businesses, but the greater regional transportation system.

5. LEVERAGING OF PUBLIC AND PRIVATE INVESTMENTS

- The Troy/Birmingham Multi-Modal Transit Center is strongly supported by MDOT, which contributed \$350,000 in the form of a planning grant to get this project underway.
- On the city's behalf MDOT requested and was approved for \$8,485,212 in funding for the Transit Center from the Federal Railroad Administration's HISPR Program.
- Federal funds in the amount of \$1.3 million, included in the Fiscal Year 2010 Transportation, Housing and Urban Development Appropriations Act, was signed by the President on December 16, 2009.
- One of the primary goals of the entire Transit Center project is to promote energy efficiency and sustainability to residents and businesses. On January 25, 2010, DELEG also awarded \$250,000 in grant funds to the Transit Center project to purchase the LED lighting for the site, building and tunnel.
- Total grant funding with no local match is \$9.95 million.
- The City's have agreed to share project costs equally. Birmingham has committed \$300,000, Troy \$1.3 million.